

NWS Form E-5
(04-2006)
(PRES. BY NWS Instruction 10-924)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

HYDROLOGIC SERVICE AREA (HSA)
San Juan, Puerto Rico

MONTHLY REPORT OF HYDROLOGIC CONDITIONS

REPORT FOR:
MONTH YEAR
May 2010

TO: Hydrologic Information Center, W/OS31
NOAA's National Weather Service
1325 East West Highway
Silver Spring, MD 20910-3283

SIGNATURE
Althea Austin-Smith,
Service Hydrologist
DATE
06/18/2010

When no flooding occurs, include miscellaneous river conditions below the small box, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (NWS Instruction 10-924).

☐ An X inside this box indicates that no flooding occurred within this hydrologic service area.

Summary: The San Juan ASOS reported 12.52 inches of rain for the month of May; 7.23 inches greater than the normal of 5.29 inches. The ASOS rainfall report from Cyril E. King Airport in St. Thomas was 5.21 inches for the month of May; 1.85 inches greater than the normal of 3.36 inches.

May 2010 began with an area of surface high pressure extending across the eastern Caribbean. This area of surface high pressure slowly shifted eastward into the central Atlantic during the first week of the month, resulting in locally breezy winds across Puerto Rico and the U.S. Virgin Islands. A few days later, a series of troughs brought additional moisture and instability across the local region, producing shower and thunderstorm activity, mainly across the northern and western sections of Puerto Rico. Towards the middle of the month, deep moisture from the tropics spread northward and dominated the weather across the local islands for the last two weeks of May. This deep moisture, combined with favorable atmospheric conditions, local effects and a low level trough to the north of Puerto Rico, brought widespread flooding rains across Puerto Rico and the U.S. Virgin Islands the last few days of the month. *(Excerpts from SJU's climate reports ... for more local climate details ... see <http://www.srh.noaa.gov/sju/?n=may2010cr>)*

As was the case in April, periods of heavy rainfall in May also resulted in urban and small stream flooding, flash flooding on the smaller basins, such as Botijas, Toa Vaca and Jacaguas and much larger scale river flooding, on the Rio Grande de Manati, Loiza and de La Plata. Unfortunately, with the flood event that occurred towards the end of the month, there were a few fatalities due to people driving across low water crossings and ...also reported, was a lightning strike in Carolina, PR in which the victim survived *(see the LSR and E3 flood stage reports for details).*

For the U.S. Virgin Islands, their heaviest rainfall occurred on May 27th and even though they experienced localized heavy rainfall, the rainfall totals and the resultant flooding was not as significant as what occurred in Puerto Rico in the days to follow. The most significant flood period occurred in Puerto Rico on May 28th and 29th with reports of many road closures in addition to flooding at multiple urbanizations across the island of PR. A few AAA dams had to invoke their flood control operation using gates to keep the flow behind and in front of the dam "in check". Also problematic was the number of landslides resulting from for the persistent rainfall throughout the month of April and May.

Top 6 - 24 Hour Rainfall Reports
24 hour totals are from 12z – 12z (8am to 8am)
Sat May 29 2010

VINP4 5.40 :VILLALBA 3NE/BAR APE (PR)
 OROP4 5.31 :LAGO DE MATRULLAS (PR)
 USAP4 5.25 :BARRAN (PR)
 ALPP4 5.09 :AIBONITO 1S, PR (PR)
 ZGBP4 5.04 :SAN LORENZO-ESPINO (PR)
 CIFP4 4.60 :R BAYAMON @ ARENAS (PR)

Top 6 - 24 Hour Rainfall Reports
24 hour totals are from 12z – 12z (8am to 8am)
Sun May 30 2010

NARP4 3.60 :LAGO LA PLATA (PR)
 ZEEP4 2.64 :RIO LA PLATA-NARANJI (PR)
 NAMP4 2.59 :GUADIANA/NRNJTO 1E (PR)
 LCOP4 2.27 :LG COAMO/LOS LLANOS (PR)
 PATP4 2.26 :RIO GR DE PATILLAS (PR)
 ANBP4 2.09 :LAS MARIAS 2NW (PR)

Top 6 - 24 Hour Rainfall Reports
24 hour totals are from 12z – 12z (8am to 8am)
Mon May 31 2010

MSAP4 2.99 :R MAMEYES NR SABANA (PR)
 NGIP4 2.79 :R ICACOS NR NAGUABO (PR)
 LICP4 2.40 :LAGO ICACOS DAMSITE (PR)
 ELPP4 2.34 :EL PORTAL/LQILLO 4SW (PR)
 NGHP4 1.94 :QUEB GUABA/NAGUABO (PR)
 VALP4 1.76 :R VALENCIANO-JUNCOS (PR)

Total Totals
24 hour totals are from 12z – 12z (8am to 8am)
3 day total

 DATE 29 30 31 TOTAL
 ALPP4 5.09 1.86 0.00 6.95
 VINP4 5.40 1.02 0.01 6.43
 NGIP4 3.17 0.43 2.79 6.39
 OROP4 5.31 0.92 0.00 6.23
 ZEEP4 3.50 2.64 0.00 6.14
 ZGBP4 5.04 1.06 M 6.1
 PATP4 3.17 2.26 0.00 5.43
 CIFP4 4.60 0.82 0.00 5.42
 TOXP4 3.55 1.85 0.00 5.4
 NGHP4 2.88 0.35 1.94 5.17
 UTUP4 4.29 0.71 0.03 5.03

<p>Please click on the link below for all LSRs for the month of May LSRs from flooding in May 2010 (Experimental and very slow so please be patient)</p>				
The most significant events will be posted below.				
0750 AM 05/28/2010	FLASH FLOOD	VILLALBA VILLALBA	PR	18.13N 66.48W EMERGENCY MNGR
ROAD 151 FLOODED DUE TO ACHIOTE RIVER OUT OF ITS BANKS. FLOODING ALSO REPORTED IN URB. LA VEGA AND ROAD 162 IN BARRIO CAMARONES SECTOR PALMAREJO. ROADS 149 AND 151 IN BARRIO PINO ALSO FLOODED. A HOUSE ALSO FLOODED IN BARRIO PINO.				
0735 PM 05/28/2010	FLASH FLOOD	BARRANQUITAS BARRANQUITAS	PR	18.19N 66.31W NEWSPAPER
TWO FATALITIES. A SMALL STREAM...A TRIBUTARY OF THE BOTIJAS RIVER...SWEPT AWAY A FORD VEHICLE WITH A MARRIED COUPLE INSIDE IN BARRANQUITAS. ONE BODY WAS FOUND DEAD THE OTHER IS STILL MISSING.				
1100 PM 05/28/2010	FLASH FLOOD	TOA ALTA TOA ALTA	PR	18.39N 66.25W EMERGENCY MNGR
ROADS 804 LOS COCOS BRIDGE CLOSED DUE TO RIO GRANDE DE LA PLATA OUT OF ITS BANKS. ROUTE 861 HACIENDA MANDRIL DETOUR ALSO FLOODED.				
0130 PM 05/29/2010	LIGHTNING	CAROLINA CAROLINA	PR	18.41N 65.98W EMERGENCY MNGR
AN EIGHT YEAR OLD GIRL GOT STRUCK BY LIGHTNING. SHE APPEARS TO BE STABLE NOW ACCORDING TO PREMA SOURCES.				
0830 PM 05/28/2010	FLASH FLOOD	MANATI MANATI	PR	18.43N 66.48W EMERGENCY MNGR
ROUTES 2 AND 667 IN THE PASO REAL AND CACHETE SECTORS FLOODED DUE TO THE RIO GRANDE DE MANATI OUT OF ITS BANKS. SEVERAL HOMES FLOODED IN THE PASO REAL SECTOR.				

The approximate amounts of Hydrologic Products issued during the month of May are as follows:

Table 1 - Hydrologic Products Issued

Non-Routine Hydrologic Products Issued:	Approximate number of Products for the month
Hydrologic Outlooks (SJUESFSJU)	3
Flood Watches (SJUFFASJU)	13
Flood Warnings (SJUFLWSJU)	8
Flash Flood Warnings (SJUFFWSJU)	35
Flash Flood Statements (SJUFFSSJU)	41
Urban/Small Stream Flood Advisories (SJUFLSSJU)	176

For monthly “radar totals” use the archive of the Advanced Hydrologic Prediction Service (AHPS) - click on Puerto Rico and request the duration you would like to view...daily or monthly remembering that the 24 hour totals are from 12z – 12z (8am to 8am in PR) - [AHPS archive of radar totals/ images](#) . Here are the [May 2010 totals](#).